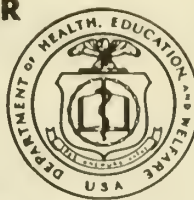


COMMUNICABLE DISEASE CENTER

Morbidity and Mortality



Vol. 14, No. 20

WEEKLY
REPORTWeek Ending
May 22, 1965

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

PRESUMPTIVE SMALLPOX — Washington, D.C.

A case of presumptive smallpox has been admitted to a hospital in the District of Columbia, prompting an extensive effort to confirm the diagnosis, to trace, vaccinate and to establish surveillance on all possible contacts. This involves persons residing in the District of Columbia and adjacent counties of Maryland and Virginia.

The patient in question is a 31-year-old resident of Ghana who arrived by air in New York City from Accra, Ghana, on May 7, 1965. She then proceeded directly to Washington, D.C. The patient noted onset of malaise, myalgia and possibly fever on May 17. On May 19, an eruption was noted, beginning first on one arm and then

CONTENTS

Presumptive Smallpox — Washington, D.C.	169
Botulism — Washington	170
Poliomyelitis — Nebraska	171
Salmonellosis — Michigan	171

spread to involve the trunk and the other extremities during the subsequent 48 hours. On May 20, the patient and her husband took a cab to the emergency room of a Washington hospital. In view of the possibility of smallpox, the patient was transferred by ambulance to another hospital with more adequate isolation facilities and the District of Columbia Health Department was notified.

Table 1. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	20th WEEK ENDED		MEDIAN 1960-1964	CUMULATIVE, FIRST 20 WEEKS		
	MAY 22, 1965	MAY 16, 1964		1965	1964	MEDIAN 1960-1964
Aseptic meningitis	20	36	29	548	551	485
Brucellosis	8	10	10	87	149	149
Diphtheria	1	10	6	75	98	190
Encephalitis, primary infectious	31	45	---	602	666	---
Encephalitis, post-infectious	26	28	---	315	351	---
Hepatitis, infectious including serum hepatitis	592	755	930	14,862	17,680	19,621
Measles	9,234	26,945	19,186	191,175	337,914	283,157
Meningococcal infections	63	53	50	1,666	1,302	1,036
Poliomyelitis, Total	2	1	8	10	26	123
Paralytic	2	1	8	9	21	92
Nonparalytic	—	—	---	1	4	---
Unspecified	—	—	---	—	1	---
Streptococcal Sore Throat and Scarlet fever	7,884	8,366	6,821	209,910	211,156	179,578
Tetanus	8	5	---	81	80	---
Tularemia	7	4	---	74	92	---
Typhoid fever	13	11	13	135	130	159
Rabies in Animals	80	118	100	2,026	1,846	1,648

Table 2. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	5	Rabies in Man:	—
Botulism:	3	Smallpox:	—
Leptospirosis: Iowa-1	12	Trichinosis: Tenn.-1	53
Malaria: Conn.-1, Pa.-1, Ore.-1	22	Typhus—	
Plague:	—	Murine:	7
Psittacosis:	13	Rky. Mt. Spotted: NY Up-State-1, Md.-1, Tenn.-1, Va.-1	15

PRESUMPTIVE SMALLPOX – Washington, D.C.

(Continued from front page)

The clinical illness has been characterized by fever (to 103°F) which persisted through May 24 (5 days after the appearance of the eruption), and by a vesicular rash with centripetal distribution involving primarily the trunk and to a lesser extent the face and extremities. One such lesion was observed on the soft palate and none were seen on the palms and soles. The lesions were somewhat superficially placed, irregular in size and shape and demonstrated some evidence of "cropping"; several lesions evolved from macule to vesicle to scab in the first four days of the eruption.

The patient received an apparently successful primary vaccination in childhood. She was revaccinated in April, 1965, without apparent take. She has a valid international vaccination certificate. She reported the possibility of contact with a child with a rash sometime during the month prior to her departure from Accra.

Fluorescent antibody results were positive for variola in several specimens of vesicular fluid; similar studies were negative for herpes and chickenpox. A skin biopsy through one of the lesions revealed the presence of intracytoplasmic inclusion bodies and no intranuclear inclusion bodies. Complement fixation antibody studies performed on the vesicular fluid were inconclusive. Isolation attempts in embryonated eggs are in process and appear to be highly suspicious for variola.

On the basis of the preliminary clinical, epidemiological and laboratory evidence the case was considered to be presumptive smallpox and extensive efforts have been undertaken by the District of Columbia Department of Public Health to minimize additional contacts with the patient and to detect, vaccinate and place under surveillance all persons who have come in contact with the patient. In addition to the strict isolation of the patient in a private room, the floor on which the isolation room is located has been closed to all visitors as well as to future admissions. Discharges from that floor have also been discontinued.

Tracing of contacts has led to the identification of over 900 contacts who have been placed in one of three categories of presumed risk. A total of 95 individuals are known to have had direct contact with the patient since May 13. Of these, 93 have been located, vaccinated and

placed under surveillance. These include the patient's husband and friends, taxicab and ambulance drivers, personnel of both hospitals, the District of Columbia Department of Public Health and the Communicable Disease Center, and laundry workers handling potentially contaminated laundry.

An additional 683 persons have been identified as indirect contacts of the patient. These include other hospital patients on the same floor, patients recently discharged from that floor, and visitors to that floor (before quarantine measures were instituted), medical and nursing staff not directly in contact with the patient, laundry workers, housekeepers and para-medical personnel who have been on the floor, and persons who were in the emergency room of the first hospital visited on May 20. To date, 599 of these 683 persons have been vaccinated and placed under surveillance.

The third category consists of secondary contacts. This includes the families and close associates of the 95 persons who had direct contact with the patient. More than 150 persons have been identified, over half of whom have been located and vaccinated.

The surveillance of the direct contacts includes both daily temperature recording and clinical examination for 16 days following the last known contact or date of successful vaccination. Indirect and secondary contacts have been instructed to report any suspicious symptoms occurring during the first 16 days after the last possible contact. These are to be investigated immediately. All persons in these categories will be contacted at the close of this period to ascertain their well being.

The hospital where the case is now isolated offered smallpox vaccinations to the entire staff on World Health Day during April 1965. Approximately one-third of all personnel responded and were vaccinated during this program.

Health authorities in Maryland, Massachusetts, New York City, North Carolina, Pennsylvania and Virginia are being advised of direct and indirect contacts who are now in their jurisdictions.

(Reported by Dr. Murray Grant, Director of Public Health, Department of Public Health, Government of District of Columbia, and a team from the Communicable Disease Center.)

BOTULISM – Washington

Five cases of clinical botulism and an additional suspected case have occurred among seven persons from Granger, Washington, who ate a common meal on the evening of May 21, 1965. The onsets of illness ranged from 28 to 60 hours after consuming the dinner. A line listing of the cases appears on opposite page.

Eight foods were served at the involved meal: (1) fried chicken; (2) boiled rice; (3) macaroni salad (con-

taining boiled macaroni, hard boiled eggs, fresh cucumbers, fresh onions, and mayonnaise); (4) canned fruit cocktail mixed with jello; (5) canned, ripe, black, pitted olives; (6) canned pork and beans (served unheated); (7) ice cream (commercial) and (8) cake. The beverages were coffee for the adults and powdered reconstituted soft drinks for the children.

The food histories are tabulated on opposite page.

Case No.	Age	Sex	Onset	Clinical Condition
1	37	F	5/22	Severe
2	17	F	5/22	Severe
3	14	F	5/23	Fair
4	18	F	5/23	Fair
5	6	M	5/24	Good
6	37	M	5/24	Good
7	13	M	Developed no illness	

All of those with clinical botulism (cases 1-5) ate all of the foods served. The suspect (case 6) who has very mild symptoms ate hurriedly and consumed only small amounts of each food. The only individual without illness (case 7) ate all foods except the pork and beans; however, the accuracy of this 13 year old boy's history is open to question.

	Case No.						
	1	2	3	4	5	6	7
Chicken	+	+	+	+	+	+	+
Rice	+	+	+	+	+	+	+
Macaroni Salad	+	+	+	+	+	+	+
Fruit Salad	+	+	+	+	+	+	+
Olives	+	+	+	+	+	+	+
Pork and Beans	+	+	+	+	+	+	-
Ice Cream	+	+	+	+	+	+	+
Cake	+	+	+	+	+	+	+

The pork and beans, the ripe olives and the fruit salad were commercially canned products. Laboratory studies are currently in progress in an attempt to ascertain the involved food.

(Reported by Dr. Ernest A. Ager, Chief of Epidemiology, State Department of Health, Olympia, Washington.)

POLIOMYELITIS - Nebraska

Two cases of paralytic poliomyelitis including one death have occurred in Morrill County, Nebraska. The first case became ill on May 9, 1965, five days after returning from a visit to Baja California, Mexico. Initial symptoms of fever and nausea were followed by stiff neck and flaccid paralysis of both lower extremities which progressed rapidly to include the upper extremities and respiratory musculature. The patient died on May 13. The second case is an 11-month-old male cousin of the first case and had onset of illness on May 12. This patient has weakness of the left arm and left facial nerve.

Stool specimens from seven of eight siblings of the

first case have yielded Type I poliovirus at the Virology Laboratory, Department of Microbiology, University of Nebraska, and confirmed as Type I at the CDC Kansas City Field Station. Laboratory studies on specimens from the second case are in process.

A mass vaccination program utilizing Type I oral poliomyelitis vaccine from the CDC Epidemic Reserve, will be conducted by the Nebraska Department of Health, in Morrill County (population 7,000) and adjacent Scotts Bluff County (population 34,000).

(Reported by Dr. E.A. Rogers, Director of Health, Nebraska Department of Health.)

SALMONELLOSIS - Michigan

During September, 1964, 9 of 11 persons partaking of a picnic dinner became ill with gastroenteritis traced to *Salmonella typhi-murium* phage type 2a. The onset of illness varied from 15 to 24 hours after the meal with symptoms of fever, chills, abdominal cramps, vomiting and diarrhea. *Salmonella typhi-murium* phage type 2a was recovered from stool cultures of 7 of the 9 persons ill.

An epidemiologic investigation suggested that home-made ice cream was the vehicle of infection. *Salmonella typhi-murium* phage type 2a was recovered from samples of the ice cream mix. Raw eggs and home-pasteurized cream were used in preparing the ice cream mix, which was uncooked prior to freezing. Samples of the raw cream, four raw eggs, and chicken feed were submitted to the laboratory for culture. All of these were negative for salmonella. However, because the sanitarian at the farm producing the

eggs used in making the ice cream had noted a sudden drop in egg production just prior to the outbreak, the investigation was continued. Because of the low production, the layers were slaughtered, and at the time of the slaughtering, samples of the intestine and liver were collected for culture. *Salmonella typhi-murium* phage type 2a was isolated from the composite sample of the livers and from 3 culture swabs taken from stool contents. The authors concluded that the raw eggs used in preparing the uncooked ice cream mix had been contaminated with salmonella.

(Reported by Dr. Donald B. Coohon, Epidemiologist, Morris L. V. French, Division of Laboratories, George Rouman, Chief, Environmental Health Division, C.A.E. Luval, M.D., Health Officer, and Madeline Heffron, Division of Nursing, Michigan State Department of Health.)

MAY 22, 1965 AND MAY 16, 1964 (20th Week)

Area	Aseptic Meningitis		Encephalitis		Poliomyelitis						Diphtheria	
			Primary	Post-Inf.	Total Cases			Paralytic				Cum.
	1965	1964	1965	1965	1965	Cumulative		1965	Cumulative			
						1965	1964		1965	1964		
UNITED STATES...	20	36	31	26	2	10	26	2	9	21	1	75
NEW ENGLAND.....	-	2	3	3	-	-	1	-	-	1	-	1
Maine.....	-	-	-	-	-	-	1	-	-	1	-	-
New Hampshire.....	-	-	-	-	-	-	-	-	-	-	-	-
Vermont.....	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts.....	-	-	3	-	-	-	-	-	-	-	-	1
Rhode Island.....	-	1	-	1	-	-	-	-	-	-	-	-
Connecticut.....	-	1	-	2	-	-	-	-	-	-	-	-
MIDDLE ATLANTIC.....	2	4	7	1	-	1	4	-	-	4	-	4
New York City.....	-	-	3	-	-	1	1	-	-	1	-	2
New York, Up-State..	2	2	2	1	-	-	2	-	-	2	-	-
New Jersey.....	-	-	1	-	-	-	1	-	-	1	-	-
Pennsylvania.....	-	2	1	-	-	-	-	-	-	-	-	2
EAST NORTH CENTRAL...	3	5	6	1	-	-	3	-	-	3	-	3
Ohio.....	-	2	3	-	-	-	2	-	-	2	-	1
Indiana.....	-	-	2	-	-	-	-	-	-	-	-	2
Illinois.....	1	-	-	1	-	-	1	-	-	1	-	-
Michigan.....	-	3	1	-	-	-	-	-	-	-	-	-
Wisconsin.....	2	-	-	-	-	-	-	-	-	-	-	-
WEST NORTH CENTRAL...	-	1	3	1	1	2	-	1	2	-	-	18
Minnesota.....	-	1	3	-	-	1	-	-	1	-	-	7
Iowa.....	-	-	-	-	-	-	-	-	-	-	-	1
Missouri.....	-	-	-	1	-	-	-	-	-	-	-	1
North Dakota.....	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota.....	-	-	-	-	-	-	-	-	-	-	-	7
Nebraska.....	-	-	-	-	1	1	-	1	1	-	-	1
Kansas.....	-	-	-	-	-	-	-	-	-	-	-	1
SOUTH ATLANTIC.....	1	3	2	3	-	-	11	-	-	8	-	15
Delaware.....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland.....	-	-	-	-	-	-	-	-	-	-	-	-
Dist. of Columbia..	-	1	-	-	-	-	-	-	-	-	-	3
Virginia.....	-	-	1	2	-	-	-	-	-	-	-	-
West Virginia.....	-	1	-	-	-	-	1	-	-	1	-	-
North Carolina.....	-	-	1	-	-	-	5	-	-	2	-	1
South Carolina.....	-	-	-	-	-	-	-	-	-	-	-	-
Georgia.....	-	-	-	-	-	-	1	-	-	1	-	8
Florida.....	1	1	-	1	-	-	4	-	-	4	-	3
EAST SOUTH CENTRAL...	2	11	-	1	-	-	2	-	-	1	-	10
Kentucky.....	-	9	-	-	-	-	-	-	-	-	-	-
Tennessee.....	-	-	-	1	-	-	1	-	-	-	-	-
Alabama.....	2	2	-	-	-	-	1	-	-	1	-	9
Mississippi.....	-	-	-	-	-	-	-	-	-	-	-	1
WEST SOUTH CENTRAL...	1	-	5	1	1	3	1	1	3	1	1	19
Arkansas.....	-	-	1	-	-	-	-	-	-	-	1	2
Louisiana.....	-	-	3	-	-	-	-	-	-	-	-	2
Oklahoma.....	-	-	-	-	-	-	-	-	-	-	-	-
Texas.....	1	-	1	1	1	3	1	1	3	1	-	15
MOUNTAIN.....	-	3	3	-	-	3	2	-	3	1	-	-
Montana.....	-	-	1	-	-	-	-	-	-	-	-	-
Idaho.....	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming.....	-	-	-	-	-	-	-	-	-	-	-	-
Colorado.....	-	-	-	-	-	-	1	-	-	1	-	-
New Mexico.....	-	-	-	-	-	1	1	-	1	-	-	-
Arizona.....	-	1	2	-	-	2	-	-	2	-	-	-
Utah.....	-	2	-	-	-	-	-	-	-	-	-	-
Nevada.....	-	-	-	-	-	-	-	-	-	-	-	-
PACIFIC.....	11	7	2	15	-	1	2	-	1	2	-	5
Washington.....	2	1	-	1	-	-	-	-	-	-	-	-
Oregon.....	-	-	-	-	-	-	1	-	-	1	-	1
California.....	9	6	-	14	-	1	1	-	1	1	-	4
Alaska.....	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii.....	-	-	2	-	-	-	-	-	-	-	-	-
Puerto Rico	1	-	-	-	-	-	-	-	-	-	-	6

Table 3. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
MAY 22, 1965 AND MAY 16, 1964 (20th Week)-Continued

Area	Brucel- losis	Infectious Hepatitis including Serum Hepatitis					Meningococcal Infections			Tetanus	
		Total incl. unk.	Under 20 years	20 years and over	Cumulative Totals		1965	Cumulative		1965	Cum. 1965
		1965	1965	1965	1965	1964		1965	1964		
UNITED STATES...	8	592	321	246	14862	17680	63	1666	1302	8	81
NEW ENGLAND.....	-	33	19	13	904	1856	3	83	36	-	4
Maine.....	-	3	1	2	188	637	-	9	5	-	-
New Hampshire.....	-	9	7	2	83	135	-	5	-	-	1
Vermont.....	-	-	-	-	42	234	-	2	1	-	-
Massachusetts.....	-	14	8	6	342	363	-	28	15	-	3
Rhode Island.....	-	3	1	1	117	92	1	12	2	-	-
Connecticut.....	-	4	2	2	132	395	2	27	13	-	-
MIDDLE ATLANTIC.....	-	93	45	48	2552	4029	6	232	150	-	4
New York City.....	-	-	-	-	446	583	1	36	20	-	-
New York, Up-State.....	-	42	18	24	1091	1799	2	59	43	-	2
New Jersey.....	-	28	17	11	432	737	1	68	50	-	-
Pennsylvania.....	-	23	10	13	583	910	2	69	37	-	2
EAST NORTH CENTRAL...	-	116	71	43	2865	2700	10	202	189	3	8
Ohio.....	-	35	23	12	860	705	1	57	53	-	1
Indiana.....	-	16	14	1	239	228	2	29	32	1	4
Illinois.....	-	14	7	6	548	466	-	51	41	-	1
Michigan.....	-	42	24	18	1047	1110	6	39	45	-	-
Wisconsin.....	-	9	3	6	171	191	1	26	18	2	2
WEST NORTH CENTRAL...	7	32	13	13	1007	1012	3	89	72	-	3
Minnesota.....	-	5	3	2	89	88	1	19	14	-	2
Iowa.....	5	8	4	2	397	151	1	5	3	-	-
Missouri.....	-	7	4	2	191	251	1	41	41	-	1
North Dakota.....	-	1	-	1	13	41	-	4	5	-	-
South Dakota.....	-	1	-	1	16	99	-	2	-	-	-
Nebraska.....	-	3	-	-	30	20	-	9	4	-	-
Kansas.....	2	7	2	5	271	362	-	9	5	-	-
SOUTH ATLANTIC.....	-	69	42	25	1526	1690	9	329	269	1	23
Delaware.....	-	-	-	-	56	37	-	4	4	-	-
Maryland.....	-	10	2	8	297	328	-	32	20	-	1
Dist. of Columbia..	-	-	-	-	18	28	-	4	9	-	-
Virginia.....	-	12	7	4	383	242	-	37	30	-	4
West Virginia.....	-	13	11	2	230	287	-	23	19	1	1
North Carolina.....	-	6	4	2	124	321	4	58	44	-	2
South Carolina.....	-	1	-	1	51	61	-	50	42	-	1
Georgia.....	-	3	3	-	55	39	3	44	26	-	3
Florida.....	-	24	15	8	312	347	2	77	75	-	11
EAST SOUTH CENTRAL...	-	29	17	11	1116	1234	6	123	117	2	14
Kentucky.....	-	6	4	1	390	539	1	54	42	1	2
Tennessee.....	-	14	10	4	416	421	2	36	38	-	5
Alabama.....	-	9	3	6	170	168	-	22	20	1	6
Mississippi.....	-	-	-	-	140	106	3	11	17	-	1
WEST SOUTH CENTRAL...	-	44	22	22	1285	1281	8	242	172	1	13
Arkansas.....	-	4	1	3	179	139	-	12	10	-	4
Louisiana.....	-	11	5	6	217	275	5	132	85	-	2
Oklahoma.....	-	-	-	-	34	75	1	17	4	-	-
Texas.....	-	29	16	13	855	792	2	81	73	1	7
MOUNTAIN.....	-	36	17	7	901	1123	1	55	44	-	2
Montana.....	-	5	2	3	68	109	-	1	-	-	-
Idaho.....	-	1	-	-	145	108	-	7	1	-	-
Wyoming.....	-	-	-	-	30	37	-	2	3	-	-
Colorado.....	-	13	11	2	179	315	1	13	9	-	1
New Mexico.....	-	9	1	-	171	169	-	8	19	-	-
Arizona.....	-	3	-	-	173	246	-	16	3	-	1
Utah.....	-	5	3	2	130	103	-	6	2	-	-
Nevada.....	-	-	-	-	5	36	-	2	7	-	-
PACIFIC.....	1	140	75	64	2706	2755	17	311	253	1	10
Washington.....	-	10	5	4	226	299	2	24	19	-	-
Oregon.....	-	11	7	4	219	312	-	23	16	1	2
California.....	1	111	56	55	2105	2005	10	248	205	-	8
Alaska.....	-	7	7	-	139	85	3	9	6	-	-
Hawaii.....	-	1	-	1	17	54	2	7	7	-	-
Puerto Rico	-	27	24	3	484	387	-	3	23	1	15

Morbidity and Mortality Weekly Report

Table 3. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
MAY 22, 1965 AND MAY 16, 1964 (20th Week)-Continued

Area	Measles			Strept. Sore Th. & Scarlet Fev.	Tularemia		Typhoid Fever		Rabies in Animals	
	1965	Cumulative			1965	Cum. 1965	1965	Cum. 1965	1965	Cum. 1965
		1965	1964							
UNITED STATES...	9234	191175	337914	7884	7	74	13	135	80	2026
NEW ENGLAND.....	929	33199	11133	948	-	-	-	1	1	22
Maine.....	74	2348	1760	122	-	-	-	-	1	1
New Hampshire.....	6	356	177	6	-	-	-	-	-	-
Vermont.....	100	778	1899	-	-	-	-	-	-	19
Massachusetts.....	376	18009	3117	171	-	-	-	1	-	1
Rhode Island.....	79	3585	1185	44	-	-	-	-	-	-
Connecticut.....	294	8123	2995	605	-	-	-	-	-	1
MIDDLE ATLANTIC.....	849	9110	39899	421	-	-	5	24	3	77
New York City.....	95	1037	12082	21	-	-	2	12	-	-
New York, Up-State.....	286	2636	8895	250	-	-	-	6	2	71
New Jersey.....	109	1546	9453	74	-	-	-	2	-	-
Pennsylvania.....	359	3891	9469	76	-	-	3	4	1	6
EAST NORTH CENTRAL...	2752	38730	74456	781	3	7	3	19	9	289
Ohio.....	218	7262	14688	94	-	-	2	6	-	147
Indiana.....	53	1308	17732	87	2	2	-	4	1	22
Illinois.....	184	1718	12963	91	1	4	1	4	6	57
Michigan.....	1419	19947	19118	339	-	-	-	3	1	25
Wisconsin.....	878	8495	9955	170	-	1	-	2	1	38
WEST NORTH CENTRAL...	776	14474	18808	311	1	7	-	3	21	378
Minnesota.....	44	515	225	10	-	-	-	-	3	80
Iowa.....	558	8050	13735	72	-	-	-	-	8	116
Missouri.....	91	2262	784	89	-	4	-	3	3	46
North Dakota.....	78	3196	3341	72	-	-	-	-	1	17
South Dakota.....	5	75	3	10	-	1	-	-	2	28
Nebraska.....	-	376	720	-	-	-	-	-	1	21
Kansas.....	NN	NN	NN	58	1	2	-	-	3	70
SOUTH ATLANTIC.....	681	20122	30110	1061	-	21	-	31	12	279
Delaware.....	6	435	300	38	-	-	-	3	-	-
Maryland.....	37	845	2803	196	-	-	-	9	-	2
Dist. of Columbia..	7	45	336	14	-	-	-	-	-	-
Virginia.....	146	3084	9573	209	-	3	-	3	8	218
West Virginia.....	280	11428	6816	290	-	-	-	1	-	9
North Carolina.....	8	247	995	9	-	4	-	7	-	1
South Carolina.....	30	863	3707	50	-	3	-	4	-	1
Georgia.....	21	559	144	16	-	11	-	2	2	23
Florida.....	146	2616	5436	239	-	-	-	2	2	25
EAST SOUTH CENTRAL...	453	11597	48443	1048	-	14	1	15	14	529
Kentucky.....	33	2100	16805	48	-	3	-	6	1	41
Tennessee.....	312	6597	18228	941	-	10	-	3	10	478
Alabama.....	89	1984	7088	29	-	1	1	3	-	7
Mississippi.....	19	916	6322	30	-	-	-	3	3	3
WEST SOUTH CENTRAL...	1032	26646	58466	713	2	17	2	18	16	324
Arkansas.....	5	1044	950	-	1	8	-	8	1	47
Louisiana.....	4	68	70	-	-	1	-	2	2	55
Oklahoma.....	17	155	767	52	-	4	1	2	3	61
Texas.....	1006	25379	56679	661	1	4	1	6	10	161
MOUNTAIN.....	734	15166	12825	1264	1	8	-	12	1	34
Montana.....	94	3095	2078	33	-	1	-	-	-	3
Idaho.....	84	2058	1373	71	-	-	-	-	-	-
Wyoming.....	12	720	125	10	-	-	-	1	-	-
Colorado.....	279	4061	2251	700	-	-	-	-	-	1
New Mexico.....	16	524	242	200	-	-	-	7	-	6
Arizona.....	69	762	5092	97	-	-	-	4	-	23
Utah.....	177	3770	1062	151	1	7	-	-	1	1
Nevada.....	3	176	602	2	-	-	-	-	-	-
PACIFIC.....	1028	22131	43774	1337	-	-	2	12	3	94
Washington.....	283	6363	15826	253	-	-	-	1	-	-
Oregon.....	119	2697	4961	13	-	-	2	3	-	2
California.....	473	10315	21753	959	-	-	-	7	3	91
Alaska.....	8	120	980	100	-	-	-	-	-	1
Hawaii.....	145	2636	254	12	-	-	-	1	-	-
Puerto Rico	91	1460	3795	18	-	-	2	3	1	9

Week No. 20 Table 4. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED MAY 22, 1965
(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes	Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over				All Ages	65 years and over		
NEW ENGLAND:	665	389	19	39	SOUTH ATLANTIC:	1113	528	46	94
Boston, Mass.-----	193	114	3	9	Atlanta, Ga.-----	112	54	5	6
Bridgeport, Conn.-----	43	21	5	1	Baltimore, Md.-----	270	117	6	29
Cambridge, Mass.-----	22	10	-	1	Charlotte, N. C.-----	40	16	1	6
Fall River, Mass.-----	33	20	1	3	Jacksonville, Fla.-----	84	35	2	7
Hartford, Conn.-----	51	28	-	5	Miami, Fla.-----	54	25	2	2
Lowell, Mass.-----	23	16	-	2	Norfolk, Va.-----	52	22	4	1
Lynn, Mass.-----	16	13	-	-	Richmond, Va.-----	96	46	1	9
New Bedford, Mass.-----	22	11	-	4	Savannah, Ga.-----	28	15	3	5
New Haven, Conn.-----	40	24	-	2	St. Petersburg, Fla.-----	75	56	5	1
Providence, R. I.-----	68	34	2	3	Tampa, Fla.-----	71	37	9	5
Somerville, Mass.-----	14	8	-	-	Washington, D. C.-----	173	82	4	17
Springfield, Mass.-----	42	26	3	2	Wilmington, Del.-----	58	23	4	6
Waterbury, Conn.-----	38	27	-	1					
Worcester, Mass.-----	60	37	5	6	EAST SOUTH CENTRAL:	623	333	25	54
MIDDLE ATLANTIC:	3246	1901	143	168	Birmingham, Ala.-----	97	47	1	7
Albany, N. Y.-----	37	20	-	1	Chattanooga, Tenn.-----	55	22	3	5
Allentown, Pa.-----	48	33	3	3	Knoxville, Tenn.-----	38	23	3	2
Buffalo, N. Y.-----	136	89	2	4	Louisville, Ky.-----	146	86	7	19
Camden, N. J.-----	39	18	2	3	Memphis, Tenn.-----	127	71	5	8
Elizabeth, N. J.-----	28	17	3	4	Mobile, Ala.-----	36	16	-	4
Erie, Pa.-----	41	19	1	3	Montgomery, Ala.-----	32	18	5	3
Jersey City, N. J.-----	59	35	3	5	Nashville, Tenn.-----	92	50	1	6
Newark, N. J.-----	121	45	9	15	WEST SOUTH CENTRAL:	1029	487	36	82
New York City, N. Y.-----	1659	967	74	86	Austin, Tex.-----	35	22	2	1
Paterson, N. J.-----	33	20	1	3	Baton Rouge, La.-----	29	15	-	3
Philadelphia, Pa.-----	503	302	12	20	Corpus Christi, Tex.-----	26	14	-	1
Pittsburgh, Pa.-----	150	92	5	8	Dallas, Tex.-----	133	61	1	8
Reading, Pa.-----	45	28	2	1	El Paso, Tex.-----	33	14	2	4
Rochester, N. Y.-----	97	65	13	6	Fort Worth, Tex.-----	90	36	1	9
Schenectady, N. Y.-----	36	27	-	-	Houston, Tex.-----	198	79	6	18
Scranton, Pa.-----	52	34	1	1	Little Rock, Ark.-----	64	37	3	6
Syracuse, N. Y.-----	62	33	1	1	New Orleans, La.-----	163	80	5	9
Trenton, N. J.-----	38	19	2	2	Oklahoma City, Okla.-----	77	39	1	7
Utica, N. Y.-----	34	20	5	1	San Antonio, Tex.-----	103	52	4	8
Yonkers, N. Y.-----	28	18	4	1	Shreveport, La.-----	50	24	9	4
					Tulsa, Okla.-----	28	14	2	4
EAST NORTH CENTRAL:	2605	1491	72	187	MOUNTAIN:	387	210	12	33
Akron, Ohio-----	85	54	1	7	Albuquerque, N. Mex.-----	42	22	1	3
Canton, Ohio-----	31	25	3	2	Colorado Springs, Colo.-----	17	11	4	-
Chicago, Ill.-----	715	384	23	50	Denver, Colo.-----	120	61	2	16
Cincinnati, Ohio-----	160	95	4	11	Ogden, Utah-----	14	7	-	1
Cleveland, Ohio-----	214	117	2	11	Phoenix, Ariz.-----	98	58	3	8
Columbus, Ohio-----	108	66	1	9	Pueblo, Colo.-----	20	9	-	2
Dayton, Ohio-----	83	46	-	4	Salt Lake City, Utah-----	48	28	1	2
Detroit, Mich.-----	352	204	21	22	Tucson, Ariz.-----	28	14	1	1
Evansville, Ind.-----	48	30	-	6	PACIFIC:	1568	937	41	102
Flint, Mich.-----	39	15	-	6	Berkeley, Calif.-----	22	16	-	-
Fort Wayne, Ind.-----	43	23	3	3	Fresno, Calif.-----	47	26	1	4
Gary, Ind.-----	57	36	1	3	Glendale, Calif.-----	32	23	-	1
Grand Rapids, Mich.-----	55	39	3	1	Honolulu, Hawaii-----	45	19	-	9
Indianapolis, Ind.-----	153	79	-	10	Long Beach, Calif.-----	62	39	-	6
Madison, Wis.-----	36	20	-	1	Los Angeles, Calif.-----	506	263	20	47
Milwaukee, Wis.-----	131	68	5	22	Oakland, Calif.-----	91	69	2	5
Peoria, Ill.-----	34	21	-	-	Pasadena, Calif.-----	33	25	-	1
Rockford, Ill.-----	32	15	-	5	Portland, Oreg.-----	103	57	1	3
South Bend, Ind.-----	55	38	4	1	Sacramento, Calif.-----	65	37	3	1
Toledo, Ohio-----	117	75	1	12	San Diego, Calif.-----	103	57	2	9
Youngstown, Ohio-----	57	41	-	1	San Francisco, Calif.-----	201	129	-	5
WEST NORTH CENTRAL:	795	478	26	46	San Jose, Calif.-----	31	22	3	2
Des Moines, Iowa-----	71	43	2	7	Seattle, Wash.-----	121	81	4	5
Duluth, Minn.-----	23	18	-	1	Spokane, Wash.-----	60	40	-	2
Kansas City, Kans.-----	30	16	3	1	Tacoma, Wash.-----	46	34	5	2
Kansas City, Mo.-----	109	62	2	5	Total	12031	6754	420	805
Lincoln, Nebr.-----	22	13	2	2	Cumulative Totals				
Minneapolis, Minn.-----	112	72	1	10	including reported corrections for previous weeks				
Omaha, Nebr.-----	81	45	6	5	All Causes, All Ages -----	260,924			
St. Louis, Mo.-----	233	136	5	9	All Causes, Age 65 and over-----	148,809			
St. Paul, Minn.-----	74	45	3	3	Pneumonia and Influenza, All Ages-----	12,131			
Wichita, Kans.-----	40	28	2	3	All Causes, Under 1 Year of Age-----	15,220			

*Estimate - based on average percent of divisional total.

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 13,000 IS PUBLISHED BY THE COMMUNICABLE DISEASE CENTER, ATLANTA, GEORGIA 30333.

CHIEF, COMMUNICABLE DISEASE CENTER	JAMES L. GOOGARD, M.O.
CHIEF, EPIDEMIOLOGY BRANCH	A. O. LANGMUIR, M.O.
CHIEF, STATISTICS SECTION	R. E. SERFLING, PH.D.
ASST. CHIEF, STATISTICS SECTION	JOA L. SHERMAN, M.S.
CHIEF, SURVEILLANCE SECTION	O. A. HENDERSON, M.O.
ASSISTANT EDITOR, MMWR	PAUL O. STOLLEY, M.O.

IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY, THE COMMUNICABLE DISEASE CENTER WELCOMES ACCOUNTS OF INTERESTING OUTBREAKS OR CASES, SUCH ACCOUNTS SHOULD BE ADDRESSED TO:

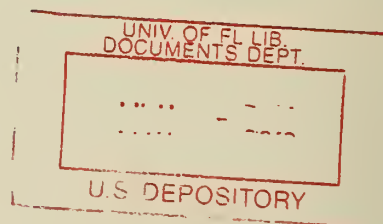
THE EDITOR
 MORBIDITY AND MORTALITY WEEKLY REPORT
 COMMUNICABLE DISEASE CENTER
 ATLANTA, GEORGIA 30333

NOTE: THESE PROVISIONAL DATA ARE BASED ON WEEKLY TELEGRAMS TO THE CDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES ON SATURDAY; COMPILED DATA ON A NATIONAL BASIS ARE RELEASED ON THE FOLLOWING FRIDAY.

SYMBOLS:---DATA NOT AVAILABLE
 - QUANTITY ZERO

THE CONSTRUCTION OF THE MORTALITY CURVES IS DESCRIBED IN VOL. 14, NO. 1,

U. S. DEPARTMENT OF
 HEALTH, EDUCATION, AND WELFARE
 PUBLIC HEALTH SERVICE
 Communicable Disease Center
 Atlanta, Georgia 30333
 Official Business



POSTAGE AND FEES PAID
 U. S. DEPARTMENT OF H. E. W.